

2015-2016 Degree Map-Bachelor of Science in Physics

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/academics/catalog/>.

Possible careers include: Natural Sciences Manager, Physicist, Physics Teacher, Aeronautical & Aerospace Engineer, Aerospace Engineering Technician, Atmospheric and Space Scientist, Cartographer, Hydraulic Engineer, Photogrammetrist

#Remedial Courses (if applicable): ENGL 0303 _____ ENGL 0404 _____ READ 0103 _____ MATH 0903 _____

Sample Schedule

Milestones/Notes

Semester 1	Hrs.	Grade	Semester 1
ENGL 1013: Comp I (ACTS=ENGL 1013)	3	#	
Social Sci./Fine Arts/Humanities/Speech	3		
MATH1914: Pre-Cal (ACTS=MATH1305) <u>or</u> MATH 1203: Plane Trig (ACTS: MATH1203)	3 or 4	#	Placement determined by MATH ACT. Students with MATH ACT 24+ may be eligible to enroll in MATH 2914.
CHEM 2124/2120: General Chemistry I (ACTS= CHEM 1414)	4		
PHSC1001: Orientation to Physical Science	1		
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023: Comp II (ACTS= ENGL 1023)	3	#	
Social Science	3		
MATH2914: Calculus I (ACTS= MATH 2405)	4		Milestone
PHSC1011: Orientation to Physical Science II	1		Milestone
CHEM2134/2130: Gen. Chem. II (ACTS=CHEM1424) Milestone	4		No substitutions allowed.
Total hours	15	GPA	Milestone

Semester 3	Hrs.	Grade	Semester 3
COMS2803: Programming in C	3		
Social Science	3		
MATH2924: Calculus II (ACTS= MATH2505)	4		Milestone
PHYS 2114/2000: General Physics I (ACTS=PHYS 2034)	4		Milestone
General Elective	3		
Total hours	17	GPA	

Semester 4	Hrs.	Grade	Semester 4
Biological Science	4		
U.S. History & Government	3		
MATH2934: Calculus III (ACTS= MATH 2603)	4		Milestone
PHYS 2124/2010: General Physics II (ACTS=PHYS 2044)	4		
Total hours	15	GPA	PHYS ADVISOR ASSIGNED

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed at <http://acts.adhe.edu/>

Fine Arts and Humanities ART 2123 Experiencing Art (ACTS=ARTA1003) MUS 2003 Introduction to Music (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL 2173 Introduction to Film JOUR 2173 Introduction to Film ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) ENGL 2013 Intro. to American Literature (ACTS=ENGL2653) ENGL 2023 Honors World Literature PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103) PHIL 2043 Honors Introduction to Philosophy	U.S. History & Government HIST 1903 Survey of American History HIST 2003 United States History to 1877 (ACTS=HIST2113) HIST 2043 Honors United States History to 1877 HIST 2013 United States History from 1877 (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003) Speech Courses SPH 1003 Intro. to Speech Com. (ACTS=SPCH1003) SPH 2003 Public Speaking SPH 2173 Business and Professional Speaking
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Sample Schedule

Milestones/Notes

Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
MATH3243: Differential Equations I	3		
ELEG2103: Electric Circuits I	3		
PHYS 3023 Mechanics <u>or</u> PHYS 3213 Modern Physics	3		
PHYS 3133: Electr. & Magnetism <u>or</u> PHYS Elective(3000-4000)	3		Note 1: PHYS3133 offered in alternating Fall semesters.
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
Fine Arts & Humanities	3		
ELEG2111: Electric Circuits Laboratory	1		
ELEG2113: Electric Circuits II	3		
PHYS4013 Quantum Mech <u>or</u> PHYS4113: Adv. Physics Lab	3		
PHYS Elective (3000-4000 level)	3		
*General Elective	2		
Total hours	15	GPA	APPLY FOR GRADUATION

Semester 7	Hrs.	Grade	Semester 7
PHYS 3023 Mechanics <u>Or</u> PHYS 3213 Modern Physics	3		
PHYS 3133: Electr. & Magnetism <u>or</u> PHYS Elective (3000-4000)	3		See Note 1 in Semester 5
**MATH Elective (3000-4000 level)	3		See excluded math courses below.
*General Elective	3		
*General Elective	3		
Total hours	15	GPA	

Semester 8	Hrs.	Grade	Semester 8
PHYS4013 Quantum Mech <u>or</u> PHYS4113: Adv. Physics Lab	3		Graduation Requirements: Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA No more than 12 hours of "D" grades
PHYS4991:Spcl Probs. PHYS&Astrmy <u>OR</u> PHYS4951: UG Rsrch in Phys	1-4		
*MATH Elective (3000-4000 level)	3		
*General Elective (3000-4000 level)	3-6		
Total Hours	13	GPA	

*General Electives: 14-17 hours (Choose at least 7 hrs. from PHYS, PHSC, BIOL, ENGR, COMS)

**Math Elective Exclusions: Math 3003, 3033, 4113

indicates a "C" or better is required

HIST 1503 World Civilization to 1500 (ACTS=HIST1113) HIST 1513 World Civilization since 1500 (ACTS=HIST1123) HIST 1543 Honors World Civilization to 1500 HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) HIST 2043 Honors U.S. History to 1877 HIST 1903 Survey of American History POLS 2003 American Government (ACTS=PLSC2003) ECON 2003 Principles of Economics I (ACTS=ECON2103) ECON 2103 Honors Principles of Economics I	Social Sciences ECON 2013 Principles of Economics II (ACTS=ECON2203) SOC 1003 Introductory Sociology (ACTS=SOCI1013) PSY 2003 General Psychology (ACTS=PSYC1103) ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013) ANTH 2003 Cultural Anthropology (ACTS=ANTH2013) GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) AMST 2003 American Studies
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